

HAVOC HELMETS

MEET THE SAFETY STANDARDS SET BY CE EN 1385

EN and CE are equally recognized standards within the Countries of Europe. These standards assure the health and safety of product users. At this time there is no recognized standard within North America to certify a water sports helmet. Thus, we follow (and meet) the standards set by CE/EN with our Havoc helmets.

CE EN 1385 is the standard NRS follows and meets for safety of our WRSI / Havoc whitewater helmets.

Testing to meet this certification involves:

- 1) Shock Absorption Capability
- 2) Effectiveness of the Retention System
- 3) Extent of protective coverage
 - a. Including ventilation holes
- 4) Buoyancy
- 5) Field of Vision
- 6) Durability

SHOCK ABSORPTION

To test shock absorption, helmets are fitted to a weighted head form that is dropped onto a fixed steel anvil. The helmet is struck from a variety of angles, including crown, front, back, temples. Impact tests are conditioned to high temperature, low temperature, water immersion or artificial aging through UV exposure before the first of multiple drops. In addition to observing obvious physical damage to the helmet, the tests measure the impact velocity of the head form and plot acceleration over time to estimate the likelihood of serious injury.

With the relevancy of recreational whitewater use and the use in SAR scenarios, this test is engineered to protect against the Life threatening injuries that can occur when the brain is directly harmed via blunt force impact to the skull.

RETENTION SYSTEM

The effectiveness of the helmet retention system (referred to in some standards as a “roll-off test”) is determined by how much the helmet shell moves out of place on the head form when a pulley system delivers a shock load by a four-kilogram weight to the back of the helmet. This reflects the risk of forces unintentionally removing the helmet from the user in the event of entanglement or a bump. The strength of the retention system is analyzed by measuring how far the chin strap stretches as force is applied to the artificial chin of a head.

For additional information, reach out to us [HERE](#).